

ing. lamp.

Barton, E.H.

INTRODUCTORY LECTURE

RUDOLPH MATAS MEDICAL LIBRARY

TULANE UNIVERSITY
SCHOOL OF ^{ON THE} MEDICINE

CLIMATE AND SALUBRITY

OF

NEW-ORLEANS.

AND ITS SUITABILITY FOR A

MEDICAL SCHOOL.

BY EDWARD H. BARTON, M. D.

PROFESSOR OF MATERIA MEDICA, THERAPEUTICS AND HYGEINE.

PUBLISHED AT THE REQUEST OF THE FACULTY

New-Orleans:

PRINTED BY E. JOHNS & CO.

1835.

PREFACE.

THE following lecture was prepared according to the indication in the title page, (as an Introductory,) with no view to publication. Those who did me the honor to attend on the occasion of its delivery, having viewed with partiality what they have been pleased to deem the important and valuable facts it contained, with regard to our climate, now first collected, and the importance of the relation of the situation of this position for a medical school, were solicitous for its publication; coming as the request did, sanctioned by the approbation of my colleagues, I did not think myself justified in withholding it, however crude and unprepared, to stand the test of criticism.

Those who know how arduously and laboriously we have been engaged in preparing our course of lectures, the first ever delivered in Louisiana, in the short period since its inception to throw off the thralldom imposed upon us by our elder sisters of the Union, and endeavor to adapt our education to our *peculiar position*, will view with indulgence a first attempt, and instead of discouraging, will throw a mantle of protection over our humble effort.

New-Orleans, January 17th, 1835.

2859

INTRODUCTORY LECTURE.

HAVING, more than fifteen years since, in the buoyancy of youthful hope, full of the ardent anticipations of that characteristic period, selected this state for my future home; laboriously engaged since in the anxious pursuit of my profession, it has been my duty as well as pleasure, to witness and to record the influence of climate upon health; and probably upon none of my compeers could the task more appropriately have fallen, so far only as it depended upon mere opportunity, to state to you the result of these observations.

The details of it should be interesting to you, because they concern the climate in which you live, the home of many of your fathers, and the probable resting place of your posterity. The importance of the subject then cannot be overrated; you cannot destroy or weaken the interest you necessarily feel in it; a desire for a knowledge of it, upon which so many enjoyments and even existence depends, will be, and should be, among our first wants. In our investigation of it, there will be but little room for speculation; there will be no drafts drawn upon the stores of fancy, though there may some upon your patience. I shall present you nothing but indisputable facts and mostly from *official records*; the inferences will be few but valuable, not the least important among them will be one, which from climate, position, and many other circumstances I shall glance at, will result the propriety, nay almost *necessity* for the establishment of a medical school, the incipient proceedings for which you are invited to participate in, and whose cheering co-operation we are so proud to acknowledge.

Located in the land of the orange and myrtle; on the confines of the American Union, the access to it formerly so difficult and distant; visited and settled mostly by men, whose whole object was merged in the pursuit of that which it has ever offered with such a liberal hand to the enterprising and industrious, it is not surprising that this *climate* and especially of this city,

should not have been understood, or that it should have suffered from the misrepresentations of interested depreciators; when people found that they could not enjoy all the advantages of this country and their own at the same time, forgetting in the scheme of adjustment of privileges and attributes belonging to *all* the operations of nature, there must every where be an equivalent, they complained, when they found that there were *any* obstructions in their career of unmingled prosperity; that man *here* was compelled to pay the 'last debt' as well as elsewhere; that *here* there were to be some restraints as well moral as physical. They soon found out that the country was 'a desperate sickly one;' that it was one of the worst on earth, that it was only fit for Africans and Indians. This 'El Dorado' then was converted into a lazar house; condemnation supplied the place of trial; investigation was superseded; and there is probably no position on earth so much visited, that is so little *known* as New Orleans. It is very true, that most of this is our own fault; there is no country in the world equally enlightened, where there is so great a deficiency of statistical details, with regard to it. No records comparatively (official) are kept of the past or present, as data for the future: so anxious are we in the race of *onward progress*, that the past is forgotten in the anticipations of the future; it does not seem to occur to us, that we must be always ignorant of our situation, if we have not a knowledge of the past with which to compare it. I wish the data were even in *existence* to satisfy you of the *exact truth*, for we have nothing to fear from it; but no industry could procure that of which there were *no records*. A moment's reflection will convince you that a deficiency of statistical information is a serious impediment to the advancement of the country in population, in wealth, and of course, in intelligence and science, and all the arts which add to the comforts and enjoyments of life. It operates to produce an *ignorance of your climate*, and as people will form an estimate of it from *some* data, they are left to form it from the record of mortality furnished by *your epidemics alone*. Is there any advantage in increasing your population, by inducing the swelling tide of emigration which is filling up the lands of other less favored sections of our Union, to clear and cultivate our fertile soil, and enjoy our in-

comparable advantages, the very garden spot of the confederacy? The effects would be to clear your forests, drain your marshes, open your water courses, apply to the purposes of man what is but a source of disease; meliorate and advance the general condition of the country; increase your wealth; promote science, and advance all the arts that go to adorn and embellish life.

We every day see attempts made (from this very cause) to project rail-roads and canals to invite to nominally more salubrious regions and suitable depots, the sources of that trade and opulence, that the great God of nature intended for this place; we see yearly arrangements effected for the purpose of trading with us but a few months, without participating in most of the necessary burdens of civic life; and is the standing for morals and decorum of New Orleans abroad derived from her stationary or floating population?

And how, you may ask, is the wonderful influence of a change to be effected? I will tell you. As man can only judge of the future from the past, and as that past is involved in obscurity, there is not only a most profound ignorance of your climate, but what is still worse, there is the worst species of misapprehension concerning it; all resulting from ~~definite~~ data. You are deficient in a *proper* register of births and deaths. You are deficient in an account of the specific diseases terminating in death, and particularly what portion of this mortality belongs to the indigenous population, and what to emigrants; at what ages these deaths occurred; and of course we are deprived of the only source to calculate the mean duration of life in this climate; nay, there are strong doubts whether the actual *amount* of your mortality is correctly given. In the name then of truth and justice; in the name of this *slandered* country, (as I will endeavor to prove to you,) we demand of the competent authority to order these details. The influence of the ^possession upon it will be hereafter adverted to. Let us then with the scanty materials in our possession, attempt to raise the veil that conceals the past from our gaze, and pausing for a moment, survey the ground we occupy and see what is our situation.

Medically speaking, the climate of a place is the same with the aggregate of the qualities of the atmos-

+ deficient

phere of that place, together with certain moral influences which this aggregate controls and modifies. Man is, with reference to it, almost the creature of habit and circumstances; and although he can ultimately habituate himself almost to any climate or condition, such are his wonderful powers; yet nevertheless he is very subject to suffer in the change. It is not given to us to change, with impunity, any one climate for another; we cannot, at pleasure, exchange the fragrant fields of the south for the frozen regions of the north, nor can an opposite one be borne without an almost equal risk. The same occurs with regard to changes on the same parallels of latitude, east and west. *Change*, then alone, no matter in what direction that change may be made, and often even to a better, is productive of derangement of health. It is not then so much from the latitude or locality itself, as it is the removal from all the circumstances to which we are habituated; habits broken and changed, and the whole morale influenced, and which, from these causes becomes constituted as wants of the system. When in our ordinary intercourse and conversation, we speak of the risk of a change of climate, is it not generally believed, that the chief risk results from a change from the north to the south? It is so; but it would not be at all difficult to *shew, that it is directly the reverse*. Of any given number of Louisianians removing to the north and an equal number of our northern brethren removing here, the difference in salubrity in a few years would be much in favor of this climate. Such removals on a great scale are very rare in the history of man, but that record of our wanderings, is every where full of the swarms exchanging the icy climate of the north for the fertile plains, the sunny meadows, and balmy airs of the south, where with increased facility of living, the enjoyments of life are multiplied, and there is a prospect of a more liberal gain on easier terms. These manifestations of his predilection to get nearer to the Sun' are every where felt. Cold is the great enemy of man, and the multiplication of diseases to the north and the outlets of human life, are fourfold, at least, in comparison with what they are in the south; ours are fewer, they run through their courses with greater rapidity, if not more merciful humanity, and many of them are fatal in passing through the seasoning or acclimating process.

one
In *our* point of view, emigration to the south would seem to be much *less hazardous* than that to the north. When emigrants have once passed through the process of southern acclimation, they have but little to apprehend from subsequent attacks of it. But northern acclimation gives no such exemption; so far is this from being the case, that one attack of it rather predisposes to another. Of the fatal influence of catarrh in its various forms; of pneumonia, pleurisy, &c.; of quinsy; of the fiend consumption, of which we have comparatively so little experience here, is filled up the great catalogue of mortality there. Of the last disease, nearly one fourth die in the northern cities.

So much has been said about this "horrible" climate; so many evils have been attributed to its lethiferous influence, that it is like opening Pandora's box, or visiting Botany Bay to come here, in the opinion of many of our northern brethren, who sit quietly in their libraries, and weigh in the scales of credulity or fancy, all the rest of the world. Let us, in our defence in the true spirit of truth and justice, subject for a moment to the test of a scrutinizing analysis the *actual facts*, the result of many years of careful observation.

I have no doubt many of you believe, I have no ordinary temerity to dare to tell, what you have heard and your fears induce you to believe *or hear* to be the truth; others will deem me guilty of imprudence in touching the subject at all; while a third party will anticipate some investigation of the cause of its supposed poisonous influence. Now it will become my duty to disappoint each of these votaries of wonder and credulity, while I attempt to draw aside the curtain that has so long concealed and obscured the truth.

Let us test our situation by dwelling for a few moments on some of the cardinal elements of climate, upon which all depends for its favorable or unfavorable influence upon health, viz. temperature, moisture, winds, and latitude, we will then see its effects upon children and longevity, and then its influence in the production of disease and relative mortality, and conclude by an application of it to the peculiar appropriateness of this position for a medical school.

Situated as our city is near the debouchure of the largest river and richest valley in the world, the inten-

sity of our summer heats is tempered by arms of the sea which almost surround us; whichever way the wind comes, it is moderated in its intensity by our happy location; consequently neither the heats of summer nor the colds of winter affect us in extremes. From these geographical and topographical data, let us apply the test of actual experiment with the thermometer; by calculation, from our latitude and altitude, our mean annual temperature is estimated to be 71,10. Actual experiment in a series of years has made it 68,80; my own observations make it but 66; the finest temperature for the most perfect health and enjoyment all over the world; but what is still more important, what are the *extremes* to which we are subjected in this "horrible climate," It is these extremes occurring rapidly that are so injurious to health in any climate unfriendly to man, and so fatal to the delicate and the invalid. All of you who have paid the least attention to this subject will agree with me when I state it as a fact, derived from the examination of registers of the weather kept here for upwards of ten years, that the thermometer rarely rises above 90 in the summer, during which our nights are almost always cool and pleasant, and it is equally a matter of observation, that during the winter, it seldom falls below 30; that the average temperature of the four hot months is about 78,46, and that the medium temperature of the four winter or cold months is about 61,38. Here then is a range of about 60 degrees (62 3-10 by actual average of ten years, and most of them unusually cold) in the course of the year, evincing a steadiness of temperature unexceeded by any part of America. I defy any city in the Union, and I might add Europe, to shew any approach to it; there is not one of the four northern cities that has not a range of 100° and sometimes more. I have myself seen the thermometer sink in Philadelphia 10 degrees below zero. You have all heard, for it has been notorious, that there has been an elevation of temperature in each of them during the last summer of from 98 to 100° or more; in New Orleans but once has it been at 92! Here then are indisputable truths to which no one should refuse credence.

But it is said that our vicissitudes are sudden and changes great; when I meet this by a denial I call upon

our opponents for the proof, I am offered the most fallacious of all human testimony, and that is, of *individual sensation*. When I contend for steadiness in the climate, I do not deny that there are changes, but these changes however *frequent* in their occurrence, are *limited in their range*. Now this is essential in every healthy climate, to prevent the listlessness of indolence and the apathy of ennui and indifference; to prevent the stagnant humors of life from standing still. The frequency of these alternations and their moderate range, are the very circumstances which render them comparatively innocuous. We have cloud and sunshine, heat and cold, winds and calms, drought and rain, in almost constant succession; but the constitution becomes injured to them and safely so, from the rapidity of their occurrence and the *limitation of their range*. Nay, this perpetual scene of atmospheric vicissitudes not only steels us against their effects, but proves an unceasing stimulus to activity of body and mind, and consequently to vigor of constitution. In other countries where these changes are less frequent, but the vicissitudes greater, the consequences to health are most deleterious. As the very circumstance which forms the charm, the attraction, the theme of praise in the Italian climate, is that which renders it dangerous, because deceitful; namely, the long intervals of fine weather between vicissitudes of great magnitude. This is the bane of Italy and all similar climates, whose brilliant suns and balmy zephyrs flatter only to betray. They first enervate the constitution, and when the body is ripe for the impression of the tramontane, that ruthless blast descends from the mountains on its hapless victim. Hence it has been said, that almost every breeze in Italy comes over a volcano or an iceberg. From these circumstances it is, that Italy is one of the most unhealthy countries in Europe, one of every 25 of the inhabitants dying annually.

There are few circumstances with regard to this climate in which most persons are more at fault than with regard to its *moisture*. I feel the full influence of this remark myself, because my own opinion has only been corrected by careful observation of the hygrometer and the rain-gauge. I have met with the records of but few similar experiments elsewhere, for the purpose of comparison, but I will say, that this instrument often

descends here to the *extreme* of *dryness* in the atmosphere. The average quantity of rain that falls here during a long series of years cannot be ascertained, it has not been recorded. So far as I have been able to ascertain from my own experiments, it is 42,48 inches; but a large quantity falling in a short time, (as is usual,) leaves a greater portion of the year clear and cloudless. The quantity of rain falling at Charleston is about 54 inches annually; at Cincinnati, 36; in Philadelphia, 30; in England, 36; in Rome, 35,7; at Calcutta, 81; at Grenada, West Indies, 112 inches. The most salubrious country in Europe is more than half the year immersed in a murky atmosphere, England; and the industrious, indefatigable, and hardy Dutchman, is almost constantly enveloped in fogs.

With regard to our *winds*, we are fortunately in the trajet of the trades, blowing from the Gulf of Mexico regularly in settled weather, and it cannot be denied, that there is no part of the United States where there are fewer *calm* days; hence then perfusion, to exchange our atmosphere, and to temper the heats of summer, we are rarely deprived of; but no sirocco blows over our fields; no sarmattan with its suffocating influence permeates our dwellings, and sucks up with its baneful breath the very sources of life.

In estimating our situation as to *latitude*, there are several circumstances to be taken into consideration, before we institute a comparison, between it in this respect, and that of the finest climates across the Atlantic. It is estimated by philosophical observers, in comparing the European with the eastern part of the American continent, that so great an influence is to be attributed to the modifying influence of this great body of water, (the Atlantic,) in ameliorating the effects of westerly and north-westerly winds, as to make a difference (northerly,) of from 8 to 13 degrees of latitude with those countries which are on the same parallel. Hence New Orleans in latitude near 30, would have all the advantages, if we take from 10 to 12 degrees as the difference, of the most delightful climate of Italy, without being subject to the freezing influence of its tramontane, or the suffocating effects of its sirocco. If but 8 degrees were added, we should be placed on a line with the classic soil of Athens, without being subject to winds

blowing over the burning deserts of Africa, whose fatal influence has been so graphically portrayed by the Father of physic. And under any event, a range of between 8 and 12°, would enable us to occupy the position of the middle of that inland sea, (the Mediterranean,) which for so many centuries was the centre, and immediately around which, was the circumference of the civilized world. From investigations and researches in progress in the interior of Guatamala, the torch of science is now sheathing its expanding light over a country, which for so many centuries has been shrouded in darkness, and kept concealed from the searching scrutiny of civilized man; facts are developing in the ruins of Palinque, to shew that *it* was the centre of an highly advanced condition of man, and that if an improved state of navigation did not enable it to whiten the waters of our noble inland sea, (the gulf of Mexico,) that *there* was the seat of an enhanced state of literature; that *there* flourished the arts and sciences; and that *there* was a high degree of civilization. And who shall say, that in the revolution of empires, and the changing seats of science, the shores of this gulf may not be what the shores of the Mediterranean were; the centre of civilization, of the arts which adorn and embellish, and of the sciences which give to man his rank in life? and who shall say that New Orleans is not destined to be the future Tyre, Alexandria, or Rome of this western world? In the advanced condition of the old world, decrepitude *must* succeed to vigor, the natural tendency of man to his primitive condition, as our venerable Madison has proved will ensue, and *here* may be another resting place of the ark of science and civilized man. I see in the brilliant and attentive assembly before me a promise of a brighter day for New Orleans, and in the spirit of prophecy let us anticipate the time when our but infant city shall have attained the splendid maturity which awaits her; shall be as distinguished for science as for commercial enterprize; and as no position on the globe exceeds hers as a grand emporium of commerce, so none shall exceed her in the cultivation of the arts and the promotion of letters.

But of all the circumstances going to prove the salubrious and flourishing condition of the country, (as to population,) there are none so much and so properly

relied on, as its influence upon its native and acclimated population, as proved by the relative numbers of children and old persons to the great mass of the inhabitants; and here there can be no room for mistake, or partiality, or prejudice. I have taken some trouble to ascertain the truth, and have used OFFICIAL RECORDS for the purpose.

I have compared Louisiana with Massachusetts as one of the most northern, and with Pennsylvania as a middle state; the results are, that in *this state* children form 1 in every 3.55 of the inhabitants. (under 10)

In Massachusetts as 1 in every 3.95

In Pennsylvania as 1 in every 3.22

I then compared New Orleans with the four northern cities; the following were the results: in New Orleans there was 1 child in every 3.96 of the inhabitants.

In Baltimore there was 1 in every 3.68

In Philadelphia there was 1 in every 4.34

In New York there was 1 in every 3.88

In Boston there was 1 in every 4.35

This certainly will be a most unexpected result to most of you, it clearly proves when coupled with the fact, that not 1 in 100, or 2 or 300 scarcely, who emigrate here, are included in this class, and go, of course, to swell the ratio against it, that Louisiana, and especially this "grave yard" New Orleans, (as it has been called,) is the healthiest city in the Union for children!

Let us next proceed to examine how far this "dreadful climate" is favorable to advanced life; for if we can prove to you, and from official records, that it is not only the best climate for children, but that the chance of acquiring a green, vigorous, and elastic old age here, is superior to that of any large city of this country, my object will have been accomplished. For this purpose I have compared New Orleans with the capitals of the two states above mentioned, and with New York and Baltimore, and this is the result.

In Boston there was over 60 years of age, the ratio to the whole population as 1 in 3.161

In New York there was over 60 1 in 3.533

In Philadelphia there was over 60 1 in 2.487

In Baltimore there was 1 in 2.573

While in New Orleans there was 1 in 2.486!

But farther, to evince to you that this climate is

highly and peculiarly favorable to *extreme old age*, I made another estimate, to shew the relative proportion of those above 100 years of age to the whole population, and as North Carolina has been remarked for the longevity of *her* inhabitants, I felt no hesitation or apprehension in including her in the comparison, and it resulted as follows:

In Massachusetts there was over 100 years of age	1 for every 10.517
In Pennsylvania there was	1 for every 9.765
In North Carolina there was	1 for every 2.081
In South Carolina there was	1 for every 2.441
While in Louisiana there was	1 for every 1.608!

Still not satisfied, and that there might be no room to complain, and as this city has not only been considered the most sickly part of the state, but credulity, ignorance, or spleen, has pictured it to be one of the most sickly cities in the world, I made the following exhibit, to shew its *peculiar* and *superior* advantages in soothing and ameliorating the advanced condition of life, and promoting its acquirement, and its immense advantages in this respect, over the other large American cities.

In Boston there was but 1 over 100 years of age	in every 61.392
In New York there was 1	in every 8.570
In Philadelphia there was 1	in every 3.094
In Baltimore there was 1	in every 1.300
In Charleston there was 1	in every 2.329
While in New Orleans there was 1	in every 997!

These results will be still more astonishing, if you will call to mind, that this ratio in favor of our city, is very much diminished against us, by there being no emigrants of *this age*, or any way approaching to it, they consisting mostly of those of middle life. We have then the astounding and to many incredible fact, and it is derived from *official records*, I repeat, that Louisiana, and particularly New Orleans, is not only highly salubrious for her native and acclimated population, but is, so far as it regards them, the healthiest large city in America! These results will not be materially varied when we come to test them by the data furnished by her diseases.

There are parts of the world where the limitation of human life is exceedingly contracted; where no acclima-

tion can habituate man to its deleterious impressions ; these are climates that are "*lethale per se*," and neither the industry, the ingenuity, nor the skill of man can alter them; it may be laid down then as a general rule, that where a climate is unfavorable to its *native population*, and where, of course, there is no acclimation, *that* must be considered a sickly climate. Do you find *here* the jaundiced complexion, the stunted growth, tumid abdomen, the stupid countenance, the shortened life, that attest that the habitual exposure to malaria saps the energy of every mental and bodily function, and drags its victims to an early grave! On the contrary, where has bountiful nature been more lavish of her charms? Where such ease, action and grace of movement, where more vivacity of expression, and all combined to form the lofty morale of our unsurpassed females. Nor has nature stunted our own sex; the native adults are usually tall, well proportioned, active, and vigorous, with great sprightliness of intellect and vivacity of spirit, having all the endowments requisite for excellence, requiring only education to develope those capacities of which nature has been so liberal.

It is a main purpose in our association to furnish these opportunities, to cultivate and direct the rising and now comparatively neglected intellect of the country, to remove those weeds which stifle its growth and to return to other states the large debt Louisiana owes them for education. We trust we can say, without the imputation of vanity or arrogating to ourselves any undue praise, that *we* have set the ball in motion; to *you* it belongs, not to realize the truth of the accusation which has been brought against you, of fickleness and inconstancy in your pursuits; of indolence from climate; of indifference and inappreciation of the highest intellectual pursuits.

But there are other effects of climate, which we will now proceed to examine, and which, with superficial observers, absorbs every other consideration, and gives to every country its distinguishing characteristic. I allude to the prevalent diseases incident to the country. I just now made a distinction between diseases occurring in the native or acclimated population and those incident to the acclimating process. The yellow or stranger's fever is probably the only one of *this* class; if you include

it among the incidental diseases of the country, (though the native and acclimated population is exempt from it,) still its victims are incomparably less numerous than those taken off by consumption to the north. Of cholera infantum, as a disease *prevailing to any extent*, which is so severe a scourge to children in the Atlantic and western cities, is here almost unknown. The same is still more applicable to the dreaded croup, and many of the other diseases of children and of more advanced years. But there is another disease which with those who form their opinions from theoretical notions, entertained *a priori*, from certain parallels of latitude, is supposed to be of frequent occurrence, I mean hepatic affections; judging from my own experience, which, however, has been very ample, corroborated by the extensive opportunities enjoyed at the Charity Hospital, I would say, that it is a disease of comparatively rare occurrence.

And when I say we have peculiar diseases, that this as well as every other climate, has an influence upon the system, derivable from all the circumstances which go to form it a distinct climate, I only mention that which is sufficiently clear to every man, having 10 or 15 years, or even less, experience in it, and who has seen diseases elsewhere. Almost the whole class of fevers, which form nine-tenths of the outlet of human life, are so modified. One of the elements for the basis of curative indications, is the probable duration of the malady; the influence of this climate so precipitates the actions of life, the wheels are driven with such rapidity, that none but the most energetic depleting treatment, in our severe diseases, will lessen their velocity or arrest the hand of death, that awaits not the days of grace to make up your mind, and the *coup de grace* is given before a tardy northerner would suspect its nature: instead then of 2, 3, 5, and 7 weeks, only so many days are allowed for treatment. This is eminently true with regard to our cold plague, almost exclusively confined to this country; and in no disease hardly, cholera excepted, do we more witness the fallacy of symptoms, according to the ordinary mode of interpreting them.

The influence of climate is felt in every grade and rank of organic life, from the lowest species of vegetative existence to the zoophyte, and from the zoophyte to

him who is lord of the creation, and even he is compelled to bend to its multifarious influences. Medical records are replete with the effect of different climates in producing various modifications of diseased impression, and it is carried *into every link and chain of that action*. I have already mentioned several to which our northern neighbors are subject, and some which are peculiar to ourselves; had I not trespassed too much on your attention, I would mention those to which each country is peculiarly subject; you all know the goitre among the Alps; the plica in Poland; cretenism in the Vallais; the barbadoes leg in the Antilles; beriluri in Ceylon, &c. &c. - *he*

If diseased action then is modified by climate, it is only an extension of the same principle to say, that remedial agents are modified also in their influence on the system by the same cause. It has fallen to my lot to witness this fact repeatedly, having seen some medicines lauded in particular diseases in European and northern journals, I have often tried them, and found their effects totally disappoint preconceived expectations. The different effects of hyosciamus in England and in Italy; of nitrate of silver in Naples and England; of the eau medicinale in Russia and France; the vastly different effects of mercury in different climates; of the influence of the ginseng on the Chinese, (which we are bound to believe to a certain extent,) so different from its inertness on us; the highly oppressive influence of aromatics in Rome, so much so as to almost realize the well known lines of the poet, "Die of a rose in aromatic pain," are sufficient to convince the most skeptical of the fact, without detaining you to mention the influence of climate on the vegetable kingdom, which is so very extensive and known to every one.

The great mass of our mortality proceed from fevers of various grades and characters, *nearly all of which* are *peculiar* to the climate. The ratio of the mortality of specific diseases it is impossible to arrive at, with any degree of *certainty*, from the reasons formerly assigned. The following, which is only an approximation to the truth, of the rate of entire mortality to entire population, is the nearest, I believe it is possible to approach it, in the present state of our knowledge. With regard to it let me previously observe, that our population nearly two-thirds of the year, is increased from 25 to 50 per

cent over and above the stationary population; that *these* furnish a much greater rateable proportion of the mortality than the former: it would be very incorrect then, to estimate the mortality by the ratio it would bear to the latter alone; I have added the lowest estimate of 25 per cent. But again, in drawing conclusions with regard to the influence of any particular climate upon health, it is not customary to assume as data, the effects of it as occurring during *epidemic years*; *they* all have their periods of incipency, duration, and decline, yellow fever included; and the time may not be distant when New Orleans may be as exempt from it as Charleston, Philadelphia, or Boston. Still the estimates I have necessarily been confined to, (with one exception,) from deficient data of other periods, are more or less influenced by the epidemic constitution which has continued here since 1817. I have taken then, the average of the ratios of three of these years least affected by yellow fever, and the mean is as 1 to 47.48; the period of highest health was in 1827, when the ratio was 1 in every 55.52. In 1816, before this epidemic influence commenced, it was actually but 1 in 66.48!

As our condition is only known by a comparison with other cities, I will mention some for that purpose. In Boston the ratio is one to every 41.26; New York 1 in 37.83; Philadelphia 1 in 38.85; Baltimore 1 in 35.44; London 1 in 40; Paris 1 in 32; Naples 1 in 28.25; Rome 1 in 24.75; in Havana 1 in 33, in Batavia 1 in 26.50 and in Bombay 1 in 20!

The great mortality here is between the ages of 20 and 40, and very much the largest portion, of unacclimated strangers, there are no records to furnish the ratio. I have stated that the consumption was a comparatively rare disease, and that the strangers, or yellow fever, furnished a very large proportion; the only data upon which I could form any estimates were the hospital returns, and here the consumptive ratio is derived from strangers mostly, that furnished by the native or acclimated population would be much less. The mortality at the Charity Hospital during the last 9 years, (1832 excluded,) is to the total mortality as 1 in 4.34; the cases of yellow fever to the whole furnished by the house is 1 in 3.48, and the consumption cases, as 1 in

be

15.86! decidedly shewing a smaller ratio of consumptive cases here than any other part of America or Europe.

All these results are doubtless very surprising to you; they shew you the extent to which this country has been slandered and misunderstood; it has been made the grave of virtue and the sink of vice; it has been made responsible for every ill, physical and moral.

From the whole course of the preceding facts and observations, I shall not be accused of hasty generalization when I state, as the very natural deduction from them, that New Orleans may be considered as a very healthy position for its native and acclimated population. That it is subject to epidemics does not at all detract from the argument; no country is exempt from them. Candor as well as truth compels me to confess, that the process of acclimation, to acquire all the benefits derivable from our position, is always attended with risk and sometimes with great mortality; here then is the difficulty to be surmounted, that it can be, the recording voice of history does not permit us to doubt; her pages have clearly demonstrated that 'a place, unhealthful as it came from the hand of nature, may be rendered otherwise by the labors of man. Of the truth of this Philadelphia furnishes a striking instance.' That city, now esteemed one of the healthiest in the world, was for more than half a century after its establishment, visited annually by bilious fever in all its varieties. The same thing is true of Amsterdam, Rotterdam, and several other cities in the Low Countries and in the north of Europe. Even Petersburg in Russia, has experienced by the force of human improvement, similar changes in relation to health. And when we speak of a healthy climate, it is gratifying to reflect, that in most instances, it is man himself who has, in a great measure, created these climates of health, and this has been as much owing to the improvement in the science of medicine, as it has in the amelioration of the effects of climate by cultivation and the advancement in his social condition. Be patient with me, a little longer, with but very few details to illustrate it. The mortality in London was 1 in every 24 of the inhabitants annually; it is now but 1 in 55, (diminished more than one half.) Paris was once 1 in 25, it is now 1 in 32, (diminished one third.)

In Geneva it was 1 in 18, it is now 1 in 43, (diminished three fifths.) In Rome it was 1 in 25; it is now 1 in 31. In Manchester it was 1 in 25, it is now 1 in 58, (and has diminished three fifths.) In Liverpool it was 1 in 27, it is now 1 in 41, (diminished one half.) In Holland the mortality has diminished one half in 24 years. In the Roman States one third in 62 years. In France one half in 50 years. In England four fifths in 131 years. And who shall say that New Orleans and Louisiana cannot and will not diminish in their mortality in an equal ratio; if my computation is correct it actually *has* diminished since 1797, it being *that year* 1 in 30. It all belongs to yourselves; you hold the scales of mortality as well as wealth, science, and all the comforts of life, in your own hands, and it shall not be *our fault* that you do not use them; at present I shall confine myself to *one*, (the rest will constitute a part of my course,) and that is a prolific one, and it brings me to the specific object of this meeting.

The cause to remove these effects of climate so much to be deplored, equal if not superior to any, which does and must influence your position or your health, is the cultivation of medical science; *it* has a more direct tendency to arrest the hand of death and ward off the influence of climate, and thus indirectly, to *develope the peculiar resources of the country*, than any other we have adverted to. The expose you have received from the professor of anatomy who has preceded me, would seem to preclude any remarks upon this subject, but as a *necessary corollary* deduced from the positions I have taken, with regard to our climate and its peculiar diseases, it is impossible to pass it over altogether unnoticed.

That our climate is *essential* *different* from that of the northern and western states, no one can deny; that our diseases are *peculiar* I trust I have succeeded in satisfying you, had I more time to enlarge upon it, there is abundance of room; it will result then from these premises, the *necessity* for the establishment of a medical school, to teach what those peculiarities are; to shew the rising medical students of the country the course of disease and of treatment, to direct their observation and reading so as soonest to make them acquainted with these peculiarities; for this, there is no substitute; nei-

ther talent however splendid, nor education however finished, can altogether supply its place; it is just the difference between theory and practice. Talent may be borrowed, experience cannot; this requires personal observation. Southern practitioners *must* be taught in the south; if they do not receive their *educations* here, they will have to learn from a *severe experience*, which might have been saved them. These remarks are not at all intended to deny that the principles of medicine are universal, and that they are, in general, the same every where; but the very nature of man is so modified by the diversities of climate, that it is often indispensable to have a personal experience of them to make successful applications.

If these remarks are true with regard to a southern school, they are still more imperative with regard to its location. Being in the centre, which nature has made and art cannot imitate, of an immense region, taking in many degrees north of us, and bounded s. and s.w. only by the tributaries of *our Mediterranean*, New Orleans is the only place from position, size, wealth, and public institutions for teaching medicine, and might soon be made equal to any in America. In what part of the United States can be found better opportunities or more advantages to study practical medicine and practical anatomy, than is to be found in the Charity Hospital? Without these, and it requires a large sea port town to furnish them, you only teach theoretical medicine, of little practical utility with these, the two eyes of the science, you teach the alphabet, and apply the principles to practical purposes. There is not and cannot be any situation in the United States similar to it, in relation to the study of tropical or tropicoid diseases. The vast destiny of the country, its past and present wants, its diseases, its immeasurable resources, the possibility of saving the country from those almost annual devastations and scourges with which it has been afflicted, all shew the importance of it, in eliciting and putting into successful operation those vast stores of information, requisite as a basis, to remove the impediments man and nature has put to the safety and salubrity of the climate, at least during the acclimating process. Here then is the place, in the very centre and focus of commercial enterprize, above all others, and why should

not science go hand and hand with it, each shedding upon the other the light and peculiar assistance derivable from their own proper sources.

Having demonstrated then, that from our climate, diseases, and position, that there is a necessity for a medical school here; the questions have been asked, is this the *time* for one? is the public *ripe* for such an undertaking? do we need it? to which it may be briefly answered; if such an institution is proper at all, and I think I have made it clear that it is so, it is proper *now*; *there must* be a beginning, and God forbid it should ever be *more needed*. The *present* only belongs to us; it is all we can control; the future is in the womb of time; *it* belongs to posterity; it is then our duty to ourselves, to seize the moment as it flies, to benefit the present generation, and to leave it as a legacy to posterity; it is due to our standing in the Union, for there is not a city in it of near our size, with the *tythe* of our wants, but has a similar institution richly endowed; and the public voice has re-echoed to our attempt with lofty acclamation, full of the generous feeling and replete with the pride of character belonging to southrons. It may truly be said there is not a part of the state that has not welcomed our noble effort. The advantage to students must be very great; besides the peculiar ones I have enumerated, may be added the risk of health and life in changing climate at the most inclement season of the year, independent of the loss of time and inconvenience in other respects. Would a northern student think of coming to spend a summer here for this sole purpose, yet the danger of spending a winter or two winters there, is at least equal. And why should they go from here 1000 miles north, under all the disadvantages I have enumerated, to learn to treat forms of disease *that are not incident to the country*, and that we meet with but seldom, while our peculiar varieties are left unnoticed! the additional expense too of going to the north is very great, and can only be borne by the affluent. *Our* object is to diffuse information among all classes; to extend a knowledge of our noble science to every hamlet and village in the south; to destroy the monster empiricism that is rearing its hydra head in every corner of our country, and we anticipate the time as not distant, if you go with us, when its bloody altars

shall be destroyed; its innocent victims saved from the sacrifice, and its temples razed to the ground.

But there is another advantage: it is in the education of the standing and character of your professional men. The condition of medical knowledge and the true advancement of your physicians is estimated as the proper index of your scientific and intellectual progress. A medical school will induce a taste for the cultivation of science; it will produce among your professional men all the benefits of emulation and laudable excitement; it will tend to remove the petty bickerings, the narrow minded and illiberal jealousies, fit only for the ignoble empiric, and you will find, it as a general rule, indulged in, in proportion to the want of true science and enlightened acquirement; I say its tendency is to this, to remove the film of ignorance, and of course prejudice, from the eyes of the public and the profession; to expose in its true light the advantages of science; to put the profession upon its proper footing, and its members in the rank of society to which a proper cultivation of it entitles them. Does the profession require improving? and the most bigotted among us will not deny it, then the tendency of such a school is, to elevate its condition by adding to its acquirements. Does your position require amelioration and amendment? it is the business and duty of your faculty to study the influences of climate, to correct its deleterious effects; to remove or counteract the causes of disease, and to promote the health of the country. In no light in which you can view it, will it not prove a blessing. You will not then, I am sure, throw a frigid look, or an indifferent countenance upon a few of your fellow citizens, who yielding to the promptings of a generous ambition, were anxious at once to benefit their country and their profession: regardless of the labors of such an arduous undertaking, they determined to make an effort to extend the empire of science; to teach medicine *as it is* in its present enlightened condition, free of the cobwebs of age and the dogmas of authority; to look over the shoulders of their predecessors, to see a more extended horizon; and thank God, with each succeeding day the horizon *does extend*, professional emulation is excited, and professional liberality is affording us a cheering welcome in its congratulations. All these are the harbingers of

better days for the intellectual advancement of our happy country, and ere long we shall see the beautiful luminary of science, shedding her expanding light over countries now shrouded in the darkness of ignorance: if we succeed, and with your generous assistance and cooperation, we do not anticipate a failure, the time is less distant, and what friend of science and humanity but joins his prayers to ours for such a blessing: if we fail, then we may mourn indeed, for such another attempt is not likely to be made soon, we shall have the consolation of the noble Grecian, "*occidimus tamen magnis ausis*, the disgrace, the stigma cannot fall upon us.

We cannot fail, as long as there is an American merchant, to listen to the call of science and humanity; and I address the merchants particularly, without disparaging others, for *they* have made New-Orleans what it is. Letters, charity, and religion have always participated largely in the munificence of that enlightened class of men: the city of New-Orleans has been peculiarly distinguished by their liberality; enterprising by profession, the very pick of other countries, what will they not do, when once properly convinced that our efforts are made for the amelioration and advancement of this noble country. But neither the enterprises of intellect, nor the generosity in aiding their accomplishment, is monopolized by any one class; all partake of it; it is both the cause and the effect of our free institutions.

That the scheme is worthy of patronage there can be no doubt; that *we* its organs are, remains to be proved. The profession here has a responsible part to act; that it has suffered disparagement, we all know; that it deserves it we deny; *we* freely risk our little all in redeeming their name from oblivion and from obloquy; and if *we* are not the worthiest sons, we thank heaven "Sparta has worthier sons" than us. The stigma cast upon us by foreigners, of "Who reads an American book? what does the world yet owe to American physicians and surgeons?" has been proudly and triumphantly answered by our northern brethren, for that part of our confederacy. Works written by American physicians are now text books in European colleges: the discoveries and improvements in the science of medicine by them, now go hand in hand with those of the members of the oldest institutions in the world; and why should they not? Science is of no country—the republic of letters has its tributaries throughout the world. Would you have the stigma *here* attached to you—that *this* is the land, "where genius sickens and where fancy dies;" that *this* remote part of our country was only fit for agricultural, and part of the year for commercial purposes—that the sun which ripens your cane and expands the bales of your cotton, dries up the sources of your intellect, and prevents application to study?—that the flood-tide of your mighty river, which bears on its swelling bosom to you the riches of every country on the globe,—bears to you also the talents and science of other countries. Must Louisiana be *forever* tributary to all the world for the men and the means of curing her endemical and peculiar diseases? Too long has she borne the overwhelming reproach that her talents and acquirements are of foreign extraction. A private teacher of the principles of my profession for near fifteen years, I can nail the slander to the counter—of deficiency of talents—of dearth of industry—of want of application of your young population. Let us unite, then, and endeavour to evolve the medical genius of the country; *we cannot* fail when we appeal to your generosity as Louisianians—to your pride as Americans—to your regard for science and attachment to humanity—to your love of health and its multifarious blessings: if these shall be wanting—to your instinctive principle of *self-preservation—your love of life*, which the God of nature has so deeply implanted in every human breast, that no torture of body, no anguish of soul, can for a moment suspend its influence over the mind: if these *shall* fail, then we have fallen upon evil times—then we have mistaken the character of our countrymen, and the blood of our fathers circulates not in your veins.